

THE COMMONWEALTH OF MASSACHUSETTS

# **EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS**

## **DEPARTMENT OF ENVIRONMENTAL PROTECTION**

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ONE WINTER STREET, BOSTON, MA



### **Request for Interest (RFI)**

**Enhancing Resilience and Emergency Preparedness  
of Water Utilities through Improved Mapping**

**November 6, 2017**

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## **1 RFI INTRODUCTION AND GENERAL DESCRIPTION**

### **1.1 Description**

The Commonwealth of Massachusetts Department of Environmental Protection (MassDEP) is soliciting interest from Public Water Suppliers (PWSs) and Publicly Owned Treatment Works (POTWs) to receive free technical assistance in developing Geographic Information System (GIS) maps of their drinking water distribution or sewer collection systems from a private consulting firm (the consulting firm has yet to be determined).

Based on the response to this Request for Interest (RFI), a list of PWSs and POTWs approved for the GIS mapping will be included in a consulting services Request for Quotes (RFQ) to be released by MassDEP later this year. The purpose of that RFQ will be to select the consulting firm that will conduct the GIS mapping. A final list of PWSs and POTWs slated to receive the GIS mapping will not be available until after a consulting firm is selected by MassDEP (time, funding and size of systems may constrain the number of GIS maps that can be completed).

### **1.2 Background**

In 2016, a collaborative effort between the MassDEP Water Utility Resilience Program (WURP) and the MassDEP Geographic Information Systems (GIS) program resulted in a preliminary statewide inventory of available PWS and POTW system mapping information. The inventory process was followed by development of a prioritized municipality/system listing, which identified PWSs and POTWs that may be in need of technical assistance for GIS mapping of their respective systems.

In the spring of 2017, MassDEP worked with thirty two (32) communities throughout the state to develop consistently mapped datalayers for thirty four (34) PWSs and fifteen (15) POTWs. Each system receiving this GIS mapping technical assistance received a hard copy paper map of their system, along with a thumb drive that contained a pdf image of their map, the GIS datalayers, and a GIS metadata description report that identified the source(s) used for developing the GIS map, the features include in the dataset, and the QA/QC process.

Information established through this project provides a uniform approach to GIS data developed for the water sector, and is aimed at assisting water systems with enhanced asset management, operational system improvements, and planning for and responding to emergencies. All detailed data developed for this critical infrastructure sector is protected by state and federal laws, including an exclusion from public disclosure pursuant to M.G.L. c. 4 §7, Clause 26(n), the Critical Infrastructure Information Act of 2002 (see 6 C.F.R. Part 29), and/or Chemical Vulnerability Terrorism Information (see 6 C.F. R. 27.400 ff). However, MassDEP is developing generalized boundary maps of the service areas for all communities within the Commonwealth. The service area boundary maps will also be provided to the systems as they are developed, and will be publicly available.

### **1.3 Eligible Entities**

Eligible entities include small, medium and large sized Community (COM) PWSs and POTWs. Non-transient non-community (NTNC) PWSs that serve as shelters during emergency situations may also be considered under this project.

## 2 ESTIMATED CALENDAR

EVENT	DATE
RFI Release Date	November 6, 2017
RFI Close Date	December 8, 2017
Consulting Firm RFQ Anticipated Release Date	December 22, 2017
Consulting Firm RFQ Anticipated Close Date	January 22, 2018
Estimated Notification of Successful Bidder(s)	February 2, 2018
Estimated Consultant Contract Start Date	February 16, 2018
Consultant Contract End Date	June 30, 2018

## 3 DATA NEEDS

All interested water utilities must be prepared to work directly with the selected contractor by February 16, 2018. Selected water utilities must be available to meet with the selected contractor initially to provide existing data for their respective system, which may include, but is not limited to the following:

- Record plans and/or system maps in paper or digital (PDF, TIFF, JPEG, CAD etc...) format(s) that depict:
  - Pipes
  - Valves
  - Manholes
  - Interconnections
  - Hydrants
  - Booster stations
  - Pump houses
  - Storage tanks
  - Treatment facilities
- Information on pipe material, size and installation dates if known, and
- Any previously developed GIS data in need of revision or update.

Selected water utilities must be available to review a draft version of the GIS map developed by the contractor, and provide any necessary corrections to the contractor within one to two weeks after receipt of the draft version. The estimated time for a water utility to spend gathering applicable information and meeting with the contractor is heavily dependent upon the system size, and organization and availability of map material. System staff should anticipate spending up to 90 hours on this project.

## 4 EVALUATION CRITERIA

Interested water utilities that would like to participate in this project should submit a response to this RFI. The responses will be used to rank interested parties and will assist in determining which systems will be eligible for GIS system mapping by the consulting firm hired by MassDEP.

### 4.1 Evaluation Components

MassDEP WURP and GIS program staff will review RFI responses from interested PWSs and POTWs with input from MassDEP regional program staff. Responses to this RFI will be evaluated based, at a minimum, upon the following criteria:

- Status of mapping information currently available to the water utility.
- Ability of the water utility staff to provide the necessary information to develop GIS datalayers for their system.
- Commitment made by the water utility to actively participate in the initial meeting request by the selected contractor.
- Commitment made by the water utility to review and provide comment on the draft GIS map developed within established timeframes.

#### 4.2 Response Format

Responses shall be limited to 2 pages (8-1/2" by 11" sheet with 0.5" margins, 11 size font minimum) and shall include the following:

- A short statement detailing how the system will benefit from inclusion in the GIS infrastructure mapping project and how the provided map will be used to enhance the system.
- A description or listing of your system's current map and data availability, format(s), status, and revisions needed to improve current map(s).
- A commitment to provide up to 90 hours of staff time to gather information and work with a consulting firm to complete a map for the system.
- A commitment to work with a consulting firm to complete the GIS mapping by June 30, 2018.
- Identification of any in-house mapping capabilities, and description of any online GIS data viewers in use by the municipality in which the system is located.
- A contact list including contacts' email, telephone numbers, and mailing address (i.e., mailing address that maps would be delivered to).

### 5 HOW TO SUBMIT A PAPER OR ELECTRONIC RESPONSE

Applicants may submit their response either on paper or electronically.

**INSTRUCTIONS:** submit your **PAPER** response in a sealed envelope that is clearly marked with the words "WURP-GIS Infrastructure – 2018", by THE RESPONSE DEADLINE, to the following address:

Massachusetts Department of Environmental Protection  
8 New Bond Street, Worcester, MA 01606  
ATTN: Kristin Divris

Paper responses must be submitted in a sealed envelope and include **one (1)** original signed copy, and **one (1)** duplicate copy.

**INSTRUCTIONS:** submit your **ELECTRONIC** response with the words "WURP-GIS Infrastructure – 2018" in the subject line, by THE RESPONSE DEADLINE, to the following Email:

E-Mail: [Kristin.Divris@state.ma.us](mailto:Kristin.Divris@state.ma.us)

Questions may be directed to Kristin Divris at [Kristin.Divris@state.ma.us](mailto:Kristin.Divris@state.ma.us) or by telephone at 508-849-4028.

**RESPONSE DEADLINE** – Responses are due no later than **December 8, 2017 at 5 pm.**  
**LATE RESPONSES WILL NOT BE CONSIDERED.**